

# Occupational Therapy Articles in Serial Publications: An Analysis of Sources\*

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## ABSTRACT

This study was designed to locate and document serial literature on occupational therapy published since 1900. Emphasis is placed on finding articles on occupational therapy or by occupational therapists from sources other than those normally associated with the professional journals. Multiple sources were used including print indexes, online databases, occupational therapy bibliographies, and tables of contents or yearly indexes. Almost 7,000 articles were identified, not including those published in foreign journals. Occupational therapy publications have increased steadily since 1900, with the most rapid increase during the 1970s and 1980s when five new occupational therapy journals were initiated. Suggestions for formulating search strategies are included.

**LOCATING** and retrieving literature in occupational therapy, an allied health discipline, is a challenge to the librarian's search skills. The problem is due in part to changes in the scope of the profession and the failure to adequately define, index, and cite the literature. For example, while some articles on occupational therapy are routinely indexed in *Index Medicus*, not all relevant journals are indexed. Furthermore, because the field is multidisciplinary, related literature in psychology, education, sociology, human engineering, and technology is scattered. The professional association of occupational therapists has not attempted to organize its literature since the late 1930s [1] and as a result, documentation of and access to this literature are fragmented. The possibility exists that research projects may be repeated, as researchers are unaware of previous studies.

This project was started at the Health Sciences Center Library, Oklahoma City, Oklahoma, in the summer of 1985 in an attempt to answer some questions about the existence, quantity, and accessibility of the serials literature. Serials literature

was selected because numerous articles known to the writer through previous studies on the history of the profession [2] did not appear in reference sources.

## PURPOSES OF THE STUDY

The study had five objectives:

1. To identify occupational therapy literature found in serials, especially those not specific to this specialty.
2. To determine the number of articles published annually since 1900, number and types of serials in which the articles appeared, changes in the number and types of serials, and trends in publication of serials literature on occupational therapy.
3. To identify problems in retrieving occupational therapy literature through printed indexes, abstracts, bibliographies, and online databases.
4. To trace the role of serials in the development of occupational therapy as a profession.
5. To discuss the serials specific to occupational therapy in relation to issues in librarianship.

## DEFINITION OF TERMS

A serial may be defined as "a publication in any medium issued in successive parts bearing numerical or chronological designations intended to be continued indefinitely" [3]. With the exception of newspapers, which were not reviewed, this study attempted to adhere to that definition.

Occupational therapy is defined by the American Occupational Therapy Association (AOTA) as the "use of purposeful activity with individuals who are limited by physical injury or illness, psychosocial dysfunction, developmental or learning disabilities, poverty and cultural differences, or the aging process in order to maximize independence, prevent disability, and maintain health" [4]. One factor which affects the retrieval of serials articles is the

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indexer's or abstractor's understanding of subject headings or thesaurus terms. The term "occupational therapy," appears to have four separate meanings. Two are generic concepts, a third is related to the practice defined above, and the fourth relates to a complete misunderstanding of the term.

One generic definition may be paraphrased as the pursuit of an activity, (such as music, gardening, games, or handicrafts) in order to be occupied or to adjust to surroundings. A second generic definition relates to the use of tasks (such as cooking, cleaning, or repairing furniture) by one person to engage the time and energy of another. Both definitions include other groups using one primary activity, such as music, art, or work therapy and vocational rehabilitation within an institutional or clinical setting. The definitions also include subsets of activities or modalities such as ergotherapy, reconstruction therapy, physical conditioning, activity programs, diversional activities or activities therapy.

The professional definition of occupational therapy involves using selected activities in order to gain, regain, or maintain health, functional capacity, and independence. Occupations listed above and many more may be included, but such use is more selective and goal-directed for individual patients or clients. Directors of these programs have educational credentials in occupational therapy and either a state license to practice, AOTA registration as an occupational therapist, or both. Occasionally indexers seem to feel that if it is "occupational, it must be therapy" and articles from occupational counselors, programmers, and analysts have been incorrectly included. The latter do not use occupations or activities in treatment programs, but are engaged in the selection and analysis of vocations and are not usually associated with therapy or medical treatment.

#### METHODOLOGY

Articles selected for this study were required to have at least one third of their content devoted to occupational therapy or to be published in an occupational therapy serial. Articles were excluded if:

1. Specific therapeutic results were not included;
2. The focus was only a single modality discipline (such as art or gardening);
3. Work was not planned or supervised by an occupational therapist and its purpose was not necessarily therapeutic;

4. A modality did not relate to occupational therapy practice;
5. They were published as an editorial or in a serial that was not indexed.

Articles published prior to 1940 were more difficult to locate and were more likely to be under-represented. The indexes consulted were: *Index Medicus* (title varies, 1900–1986), *Excerpta Medica* (1956–1986), *Cumulative Index of Hospital Literature* (1950–1986), *Rehabilitation Literature* (1950–1986 including abstracts), *Education Index* (1929–1986), and *Readers' Guide to Periodical Literature* (1900–1986). Abstracts reviewed were *Psychological Abstracts* (1929 to date), those appearing in *Archives of Occupational Therapy* (1922–1924), and in *Occupational Therapy and Rehabilitation* (1925–1946). Special bibliographies on occupational therapy were also reviewed [5–15]. Additionally, the following databases were searched from their beginning dates through December 1986: MEDLINE, Health Planning and Administration, ERIC, Exceptional Child Educational Resources, Embase, Psyc-Info, Cumulative Index to Nursing and Allied Health Literature, (CINAHL) and Mental Health Abstracts. Other articles were located by examining the references or bibliographies of articles.

#### FINDINGS

A total of 6,942 articles were identified in the study, of which 6,598 qualified as being about occupational therapy or appearing in occupational therapy serials. Table 1 lists the numbers of articles appearing in journals associated with occupational therapy.

Table 2 indicates the number of occupational therapy articles in non-occupational therapy journals for the periods 1917–1939 and 1940–86. The journals are classified by type of journal. The time periods were selected to determine if changes in practice after World Wars I and II had any noticeable effect on publication. No articles reviewed in the study appeared in specialty publications prior to 1940; after this period, thirty-one articles were found in journals on arthritis, rheumatism, leprosy, geriatrics, mental retardation, ophthalmology, and biomedical technology.

Table 3 shows the total number of articles published in occupational therapy by decade, 1900–1986. Of the 6,598 articles, 1,574 (23%) were published in journals not associated with occupational therapy. There was a great increase in the total number of articles between 1910 and 1929, after which the number increased only slightly.

## OCCUPATIONAL THERAPY ARTICLES IN SERIAL PUBLICATIONS

TABLE 1  
TOTAL NUMBER OF ARTICLES LOCATED IN SERIALS  
ASSOCIATED WITH OCCUPATIONAL THERAPY

Title of serial	Number of articles
<i>Maryland Psychiatric Quarterly</i> , 1911–23 (articles on occupational therapy only)	98
<i>Archives of Occupational Therapy/Occupational Therapy and Rehabilitation</i> , 1922–51	1180
<i>American Journal of Occupational Therapy</i> , (AJOT) 1947–1986	2283
<i>Proceedings of the National Society for the Promotion of Occupational Therapy</i> , 1917–20	29
<i>Proceedings of the American Occupational Therapy Association</i> , 1954–58, 1960–1964	183
<i>Proceedings of the World Federation of Occupational Therapy</i> (every four years starting in 1954)	605
Occupational therapy journals published since 1980 ( <i>OTJR</i> , <i>OTMH</i> , <i>POTP</i> , <i>POTG</i> , and <i>OTCH</i> )	646
<b>TOTAL</b>	<b>5,024</b>

Beginning with the 1970s, growth began to accelerate, showing an increase of approximately 30% during the 1970s and 27% during the 1980s.

This trend correlates with the increase in number of issues published annually (from six to ten by 1972) in the profession's official journal, *American Journal of Occupational Therapy*. However, the most rapid increase has occurred since 1980, due to three changes: the number of issues of the *American Journal of Occupational Therapy* increased from ten to twelve, five new journals with a focus on occupational therapy began publishing, and an increase in relevant articles in journals not associated with the profession. These increases coincided with a renewed interest in research, the result of the AOTA's designation as the center of occupational therapy research activities in 1979 [16]. This interest in research may have provided incentive to publish, especially among academic faculty.

The range of serials does not seem to have changed over the years. Occupational therapists continue to publish in a wide variety of serials about many field-related subjects. This means that articles cannot be located by the subject heading "occupational therapy" alone. For example, articles in specialty areas such as occupational therapy

TABLE 2  
NUMBER OF OCCUPATIONAL THERAPY ARTICLES  
FOUND IN NON-OCCUPATIONAL THERAPY JOURNALS,  
1917–39 AND 1940–1986

Type of journal	Number of articles		
	1917–39	1940–86	Difference
Hospital	17	22	5
Medicine	46	64	18
Physical medicine	9	34	25
Psychiatry	19	35	16
Nursing	6	22	16
Tuberculosis	4	3	-1
Allied health	4	11	7
Public health	8	8	0
Orthopedics	3	20	17
Education	16	26	10
Science	2	9	7
Other specialties	0	31	31
Popular	15	10	-5
Miscellaneous	5	8	3
<b>TOTAL</b>	<b>154</b>	<b>303</b>	<b>149</b>

in elementary schools, are more likely to appear in serials related to education, pediatrics, or childhood developmental disorders. Specialization, however, was not addressed by this study. An important trend in occupational therapy articles is the change from articles written on "what is occupational therapy?" to those that stress results of treatment. "How to" articles appear at about the same rate.

TABLE 3  
TOTAL NUMBER OF ARTICLES PUBLISHED IN  
OCCUPATIONAL THERAPY AND IN NON-OCCUPATIONAL  
THERAPY JOURNALS, BY DECADE, 1900–1986

Decade	Total number of articles		Number of articles not in occupational therapy journals
	Number	Change from previous decade	
1900–09	17	—	17
1910–19	253	+236	156
1920–29	688	+435	309
1930–39	610	-77	186
1940–49	690	+80	174
1950–59	770	+80	148
1960–69	804	+34	183
1970–79	1163	+359	192
1980–86	1603	+440	209
<b>TOTAL</b>	<b>6598</b>	<b>—</b>	<b>1574</b>

The role of occupational therapy serials has expanded over the years, although their major functions are still to document the field, to centralize the publication of relevant articles, and to communicate with practitioners. Since 1917 there has always been an official journal of AOTA, namely, the *Maryland Psychiatric Quarterly*, 1917–1921; the *Archives of Occupational Therapy*, 1922–1924; *Occupational Therapy and Rehabilitation*, 1925–1946; and the *American Journal of Occupational Therapy*, 1947–present.

The official journal has had the most consistent history of publication. Proceedings of AOTA annual conferences have been published during 1917–1920 and during 1957–64, with the exception of 1962. Proceedings of the World Federation of Occupational Therapists have been published every four years since 1954. AOTA published a newsletter from 1939–1972 which in 1973 became a newspaper, currently the *OT News*. Yearly print publications began in 1932 with the first directory of occupational therapists, listing names of qualified practitioners [17]. No articles have appeared in any of the yearly publications. Analysis of the purpose and the role of serials literature, therefore, was based on AOTA's official journal.

There are seven major U.S. serials publications associated with occupational therapy. The *Archives of Occupational Therapy* began in 1922 and changed in 1925 to *Occupational Therapy and Rehabilitation* in order to appeal to a larger audience. In 1947 the journal ceased to be associated with occupational therapy when the first issue of *American Journal of Occupational Therapy* (*AJOT*) was published. In 1952 the title was changed to *American Journal of Physical Medicine* in order to disassociate itself from occupational therapy.

The second journal, *AJOT*, has been the official journal of the AOTA since 1947 and the sole representative of occupational therapy until the 1980s. The AOTA's sister organization, the American Occupational Therapy Foundation, began publishing the *Occupational Therapy Journal of Research* (*OTJR*) in 1981. *OTJR* is a peer-reviewed journal that accepts papers on any research topic associated with occupational therapy, regardless of funding source.

The other four serials, published by Haworth Press, are *Occupational Therapy in Mental Health*, *Physical and Occupational Therapy in Pediatrics*, *Physical and Occupational Therapy in Geriatrics*, and *Occupational Therapy in Health Care*. These titles all appear in the Brandon and

Hill "Selected List of Books and Journals in Allied Health Sciences" except the last, which was probably unavailable when the list was compiled [18].

Foreign serials were not included in the study because accurate publication records were not available. Three appear in various print indexes and online databases, the *Australian Occupational Therapy Journal*, *British Journal of Occupational Therapy*, and *Canadian Journal of Occupational Therapy*. Coverage of these journals changes frequently, which complicates a literature search.

### *Problems in Retrieval*

This study has identified a large body of relevant serial literature in occupational therapy. Access, however, is not simple. No single bibliographic tool can be relied upon to retrieve all the literature. Librarians and users must consult multiple sources.

Locating serials literature is complicated in part by the nature of the field. Occupational therapy does not fit neatly into one scientific discipline, and cannot be classified as primarily medical, educational, engineering, or other designation. Occupational therapy is an applied field which draws knowledge and skills from many sources and applies them in many diverse ways.

Another factor in literature retrieval is the lack of a comprehensive bibliography. Since 1938 practitioners, researchers, and others have been dependent on librarians and on their own skill in locating literature. Perhaps the present emphasis on research will result in more complete literature indexes and abstracts, as researchers need to review the literature before beginning projects.

This difficulty of access may account for the reports of Johnson and Leising, who found that 32.6% of citations for articles published in the *AJOT* in 1978, 1980, and 1982 were located in the journal itself [19]. Even when citations from all occupational therapy journals were added together, the total number was changed by only 2.1%, to 34.7%. Considering the large number of articles located in this study that are not from a journal targeted primarily at occupational therapy, there seems to be an information gap—possibly created by difficulties in accessing the literature.

Alaszewski identifies another problem in indexing and retrieving this literature [20]. He notes that occupational therapy is holistic in orientation, that is, it places more emphasis on the patient than on the specific technique used. The holistic approach is concerned with treatment associated with broad categories of patients, with aids and

equipment for adapting to an environment, and with adjustments to improve performance at home or work. In contrast, Alaszewski views physical therapy as concerned primarily with treatment, equipment, body part functions or specific clinical conditions, or treatment focused on specific parts of the anatomy or specific clinical conditions. The same analysis can be made for indexing systems. Indexing terms exist for specific treatment techniques for such disorders as cerebral palsy or arthritis, but unique terms do not exist for improving the work adjustment of persons with these chronic disorders. Locating articles on diathermy is relatively easy, but finding information on effectiveness of preventive splinting is more difficult.

#### SUGGESTIONS FOR IMPROVING SEARCHING

Searching the literature might be improved by providing better scope notes for the term "occupational therapy." Presently, most bibliographic tools contain references to articles that are not within the scope. As noted in the section on definitions and descriptions, single modality therapies such as art, music, recreation, dance, horticulture, and manual arts therapy are separate health careers [21], and literature in these fields should be separated from that of occupational therapy. The term "occupational therapy" should be reserved for the practice of occupational therapy by occupational therapy personnel.

Limiting the scope note to the profession of occupational therapy as described in this paper should eliminate the indexing of articles which apply to careers in evaluating, educating, training, counseling, and rehabilitating people for specific jobs. These career titles include occupational analyst, vocational educator, vocational rehabilitation counselor, career placement officer, work evaluator, work adjustment specialist, prevocational trainer, etc. Again, literature in these fields should be separated from that of occupational therapy unless persons educated in occupational therapy are supervising the treatment or training program.

A word of caution should be added to the scope note on "occupational therapy" regarding the use of words or phrases from titles of articles, such as work therapy, industrial therapy, physical reconditioning, ergotherapy, psychiatric rehabilitation, and occupational psychiatry. These terms are not synonymous with the print definition of occupational therapy; the term "occupational" includes activities that engage one's time, energy, interest, and attention [22]. Thus, the concern is much broader than work for pay, including self care and

leisure. More specifically, self care, leisure, and work are examined in terms of the individual's ability to perform these actions satisfactorily to self, as well as to others in the living environment. Treatment planning is highly individualized, whether the actual treatment is carried out singly or in a group. The program is never designed to fill up the hours in a patient's day, but is directed toward a specific goal or purpose that will enable the person to function more independently.

Additional terms under the main heading of occupational therapy may be useful when searching its literature. In *Index Medicus*, for example, there are only two headings for occupational therapy. The heading appears under E2.831.489—Procedures and Technics—Therapeutics, Rehabilitation and G2.532—Health Occupations [23]. The heading does not appear under F4—Behavioral Tests, Therapies, Services, even though occupational therapy has served those with mental health problems longer than any other patient group.

To facilitate searching, it is imperative that all journal literature on occupational therapy be indexed. *AJOT* has been covered in two indexes, one which covers 1947–1971 [24], and the second which covers 1972–1983 [25]. The latter is based on the medical subject headings used by the National Library of Medicine, with modifications added to accommodate the literature. However, there is no cumulative index to *Occupational Therapy and Rehabilitation* nor to any of the proceedings, newspapers, and new journals. An important function of cumulative indexes is to provide suggestions for terms to be used in searching other print indexes or databases.

For searchers struggling with the current systems, a few ideas may be helpful. Subjects such as sensory integration, sensory integrative dysfunction, vestibular stimulation, or Ayres techniques came from psychology, and can be searched best in *Psyc-Info*. Subjects such as mouth sticks, hand-writing aids, or modified eating utensils can be found in the print indexes to *AJOT* or be text words for searching in the title field online. A category such as equipment and supplies or self-help devices is helpful only in limiting the number of items to be searched by text word. Therapy equipment, such as sanding blocks, cuffs and gloves, or special chairs, is easier to locate in the print indexes to *AJOT* or in chapters in books on treatment. Much of the therapy equipment was designed years ago, and has not been discussed in any detail, if at all, since the use of computerized databases.

Occupational therapists frequently use terms such as facilitation techniques, neuromuscular facilitation techniques, sensorimotor techniques, neurodevelopmental therapy, sensory motor therapy, proprioceptive neuromuscular facilitation, Rood techniques, Bobath techniques, or Kott and Voss techniques, yet MEDLINE provides no useful category for this group of therapeutic techniques. Text word searching is possible, but time-consuming. NAHL has provided the category "sensory motor integration," which is the best term to date. Models used to identify specialized practice areas in occupational therapy are frequently indexed under psychological or theoretical models.

The best source of reference articles is usually *AJOT*. If a preliminary search identifies an *AJOT* article, it is probably useful. If the database includes the journals from Australia, Great Britain, or Canada, they can also be helpful.

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